

REMARKS

Election/Restriction

The Examiner has required restriction to certain claims groups. Applicant hereby Elects to prosecute group III claims 1-19, 42, 44, 45, and 47-50, drawn to a wafer carrier, at this time.

Rejections pursuant to 35 USC § 112

The Examiner has rejected claims 48 and 49 as indefinite. As noted in the above Amendments, these claims have been canceled. Therefore, Applicant respectfully requests removal of rejections pursuant to 35 USC § 112.

Rejections pursuant to 35 USC § 102

The Examiner has rejected independent claim 1 as anticipated by Chow et al. (U.S. Pat. No. 6,187,134) along with remaining dependent claims 2, 3, 5, and 10-12. In particular, the Examiner states that Chow discloses a recess that "could accommodate a wafer of any size and shape". However, as described below, this differs from the presently claimed invention.

The Embodiment claimed in claim 1 of the present application includes a wafer carrier "having a recess to accommodate a first wafer of a first size and a second wafer of a second size different than the first size". That is, the same recess may accommodate separate wafers (i.e. "a first wafer" and "a second wafer") of different sizes. Chow, on the other hand, makes no such disclosure. Rather, the Examiner relies on one of the stated "OBJECTS AND ADVANTAGES" of Chow, in which it is stated, "Another

object of the present invention is to accommodate wafers of any size and shape" (col 2, lines 44-47). While this is a stated object, Chow never actually discloses a single recess which may accommodate separate wafers of different sizes as in the present application. At best, the stated object of Chow can be read as meaning that the Chow wafer holding device may be configured to hold *one* of many alternate wafer sizes (emphasis added). This distinction is further clarified by the requested amendment of independent claim 1 above.

In addition to claim 1, all other pending claims are dependent from claim 1. Therefore, for the reasons stated above, Applicants respectfully request removal of all rejections pursuant to 35 USC § 102.

Rejections Pursuant to 35 USC § 103

The Examiner has rejected various pending claims dependent from amended independent claim 1 as unpatentable over Chow alone and in view of Toya et al. (U.S. Pat. No. 5,074,017). However, for the reasons stated above, Chow fails to disclose features claimed in independent claim 1. Therefore, claim 1 and all dependent claims therefrom are allowable. Applicants respectfully request removal of rejections pursuant to 35 USC § 103.

Conclusion

Applicant respectfully submits that claims 1, 4-6, 8-12, and 14-19 are in condition for allowance. The Examiner is requested to contact the undersigned attorney at (203)

794-1100 should this be seen as helpful in advancement of prosecution of this application.

VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

20. (Amended) A wafer carrier for coupling to a process tool and having a recess to accommodate [enabling] a first wafer of a first size and a second wafer of a second size different than the first size [and/or shape to be processed in a process tool configured for processing a wafer of a predetermined size and/or shape, wherein the wafer carrier has said predetermined size and/or shape and includes at least one recess therein having said different size and/or shape].

21. (Canceled)

22. (Canceled)

23. (Amended) The wafer carrier of claim 1, having one of the first wafer and the second [a]wafer in the[a] recess[therein, in close-fit relationship to the recess].

24. (Amended) The wafer carrier of claim 4, wherein each of the first wafer, the second wafer, and the [carrier and said]recess [therein]has a cylindrical shape.

25. (Amended) The wafer carrier of claim 5, wherein one of the first[said] wafer and the second wafer[carrier] has an outer diameter [on the order of 150 mm, and the wafer and wafer recess have a diameter on the order] of about 100 mm.

26. (Canceled)

27. (Amended) The wafer carrier of claim 5, wherein one of the first wafer and the second[said] wafer[carrier] has an outer diameter [on the order of 200 mm, and the wafer and the wafer recess have a diameter on the order]of about 150 mm.

28. (Amended) The wafer carrier of claim 5, wherein one of the first wafer and the second [said]wafer [carrier]has an outer diameter[on the order of 150 mm, and the wafer and the wafer recess have a diameter on the order] of about 125 mm.

29. The wafer carrier of claim 1, having a generally planar body.

30. The wafer carrier of claim 1, having a circular shape.

31. The wafer carrier of claim 1, wherein the recess is defined by[has] a flat floor to accommodate a flat surface of one of the first wafer and the second[, whereby a correspondingly flat] wafer[can be reposed in the recess with a main bottom face of the wafer in contact over its facial area with the floor of the recess].

32. (Canceled)

33. (Amended) The wafer carrier of claim 1, formed of a semiconductor wafer material[of construction].

34. The wafer carrier of claim 1, formed of a material selected from the group consisting of silicon carbide, silicon, quartz, graphite, boron nitride, aluminum oxide, aluminum nitride, silicon carbide on graphite, titanium carbide on graphite, glassy carbon, sapphire, indium phosphide, gallium antimonide, gallium arsenide and III-V nitrides.

35. (Amended) The wafer carrier of claim 1[, wherein the wafer carrier is] formed of a [same]material of [construction as said]one of the first wafer and the second wafer.

36. (Amended) The wafer carrier of claim 16, wherein [said]the material is[of construction comprises a material] selected from the group consisting of silicon carbide, silicon, quartz, graphite, boron nitride, aluminum oxide, aluminum nitride, titanium carbide, glassy carbon, sapphire, indium phosphide, gallium antimonide, gallium arsenide and III-V nitrides.

37. (Amended) The wafer carrier of claim 1, wherein the wafer carrier is formed of a different material [of construction from]than that of one of the first wafer and the second[said] wafer.

38. (Amended) The wafer carrier of claim 18[, wherein the wafer carrier is]

formed of a material [of construction]that is more etch-resistant [in relation to an etch-susceptible]than a material of one of the first wafer and the second[construction of the] wafer[, with respect to a same etchant].

20. - 70. (Canceled)

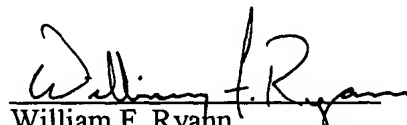
Petition hereby is made under the provisions of 37 CFR 1.136 for a two (2) month extension of the time for submission of Amendment in response to the November 20, 2002 Office Action, which set a three (3) month term for response, expiring February 20, 2003.

With the entry of this Petition, the response term is extended to expire on April 20, 2003.

Please charge deposit account no. 50-0860 in the amount of \$410.00, as the fee specified in 37 CFR 1.17 for this Petition for Extension of Time.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-0860.

Respectfully submitted,


William F. Ryahn
Registration No. 44,313

Advanced Technology Materials, Inc.
7 Commerce Dr.
Danbury, Ct. 06810
203 794-1100, Ext. 4140
203 797-2544 Fax
Attorney Ref: ATMI-477